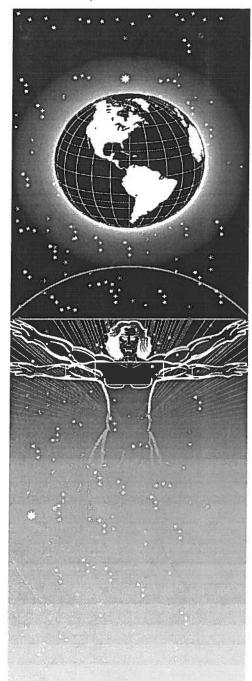
AL/EQ-HBK-61-202B



UNITED STATES AIR FORCE ARMSTRONG LABORATORY

HOW TO PUBLISH YOUR TECHNICAL REPORT ON TIME--WITHOUT AN EDITOR

LARRY TESTERMAN

TECHNICAL EDITING FUNCTION (NOW EXTINCT)

ARMSTRONG LABORATORY ENVIRONICS
DIRECTORATE (AL/EQ)
139 BARNES DRIVE, SUITE 2
TYNDALL AIR FORCE BASE, FLORIDA, 32403-5323

SEPTEMBER 1997

ENVIRONICS DIRECTORATE PROGRAMS AND PLANS DIVISION 139 BARNES DRIVE TYNDALL AIR FORCE BASE FL 32403-5323

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This document is submitted as an historical record of work performed. Limitations of the available media rendered editing impractical; therefore it is retained "as is."

REPORT DOCUMENTATION PAGE

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AL/EQ-HBK-61-202A, Project Manager's Guide to the Scientific and Technical Information Program and Technical Information Process AL/EQ-HBK-61-202B, Handbook for Authors of Technical Reports							
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PREFACE

This handbook is designed to help both you, as a project manager, and your STINFO focal point (Andrew Poulis) to produce and publish quality technical reports without the benefit of a technical editing function. It is not intended to stand alone. Instead, it is to be used in conjunction with several other publications, which you either have of can obtain from the STINFO focal point.

ANS/NISO Z39.18-1995 Scientific and Technical Reports--Elements, Organization, and Design

AL/EQ-HBK 61-2. Project Manager's Handbook*

AL/EQ-HBK-61-202A Project Manager's Guide to the Scientific and Technical Information Program and Technical Information Process*

AL/EQ HBK 61-202B Handbook for Authors of Technical Reports*

The latest handbook does not contain answers to all you questions because (1) The answers are not available at this time and (2) I could not think of all your questions.

Andrew Poulis is your new STINFO focal Point. He will assist you with a qualitative review of your reports and with processing the final copy for publication. He is not and editor; you get to do all this yourself. We hope this book will be helpful.

*These handbooks are still good and Mr. Poulis has the camera-ready copies. Just mentally delete all the references to technical editing. You have the long-awaited opportunity to to your own.

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HOW TO PUBLISH YOUR TECHNICAL REPORT ON TIME

SECTION I

OBJECTIVE

As a project manager, you are about to enter a brave new world created by downsizing and reinventing government - The "good old days" when each laboratory had technical editors at its disposal are gone. This handbook is intended to to assist you, as a project manager, to do the minimal editing needed to publish a timely technical report without sacrificing quality and readability.

BACKGROUND

Until about 4 years ago, technical editors were helping our scientists and engineers to produce high-quality technical reports. Then came a series of personnel cuts. Upper management decided that editors were expendable and a luxury they could not afford. In short, they decided that, that, in addition to your myriad of duties, you can also edit and publish your own technical reports. In fact, by 30 September 1997, there will not be any technical editors at most laboratories, this one included.

We have tried to address the question of how much help you will need in doing the minimal editing needed to produce a high-quality and readable technical report published on time. Because I also doubt that most people realize the amount of work that goes into processing, tracking and distributing the published report, this handbook will be designed to cover the entire editing and publishing process from cradle to grave.

SCOPE/APPROACH

No one will attempt to convert project managers into English majors. Instead this handbook is written to provide you with the basic fundamentals of editing and publishing needed to do this facet of your job and still successfully manage your project. The handbook will be divided into four basic sections: Documentation Requirements, Prepublication Planning, Editing, Publishing, and Distribution. The appendixes will include useful examples of all the paperwork involved in the process.

SECTION II REQUIREMENTS

REQUIREMENTS (AIR FORCE INSTRUCTION 61-2)

Air Force Instruction 61-2 requires that we publish at least one technical report for each Work Unit. This report is to be published and distributed not later than 180 days after the technical effort has ended. We count the 180 days from the time we complete the initial edit of the first draft. The table below shows proposed timelines for the review and publication process.

TIMES FOR PUBLICATION OF TECHNICAL REPORT

EVENT	DAYS AFTER END OF TECHNICAL EFFORT
PROJECT MANAGER RECEIVES DRAFT PROJECT MANAGER/EDITOR REVIEW DRAFT	30 60
PROJECT MANAGER RECEIVES CORRECTED COPY	90
TECHNICAL REPORT PROCESSED FOR SIGNATURES PRINTING AND DISTRIBUTION	5 120 150

NOTE: These are maxium times and represent less than the required 180 days; Indeed we should be able to publish most of these in 120 days or less.

The final report will be reviewed by the STINFO Program Manager (whoever and wherever that is) and signed by the project manager and supervisor, before final processing for printing. Printed reports will be distributed to Defense Technical Information Center and according to our Standard Distribution List and instructions of the Project Manager. In addition, a word processing disk should be provided to DTIC.

No Work Unit can be closed without a copy of the Standard Form 298 that accompanies the final technical report. Waivers of publication requirement can be granted upon written approval of the STINFO Program Manager and the EQ Director. Such instances must be rare and justified.

A copy of the published technical report or the letter waiving its publications must be filed in the Project manager's Case File.

SECTION III PREPUBLICATION PLANNING

Publishing a quality technical report on time need not be a bothersome task, if you consider it an essential part of project management and plan accordingly. Indeed, your efforts in doing this may help some fellow researcher and save critical dollars.

The prepublication process begins with the Work Unit Summary, your progress report. You start by entering the requirement for a technical report when the first Work Unit Summary is written. As the project takes shape, you can actually add a title for the report as part of your annual update (block 39.2). At the end of the initial edit, you will have a Technical Report Number (block 39.3) as a reference point, and, upon closeout of the properly maintained Work Unit Summary, you will have a published technical report with a DTIC accession number (block 39.4).

The next step is your contract requirements. You wish to be sure that you get a readable and accurate technical report, submitted on time. Data Item Description (DID) 87011(Figure A-1) sets forth basic requirements for a technical report. Among other things, it establishes ANSI/NISO Z39. 18-1995 as the standard for publication. You must assure that this DID is tailored to your requirements by a Contract Data Requirements List (CDRL). You must use the CDRL to:

- a. Assure that document is protected from general distribution until we know whether it is public release or not.
- b. Prohibit contractor from sending technical report to DTIC before we have authorized its publication.,
 - c. Require a DraftTechnical Report within 30 days after end of technical effort.
 - d. Require a Camera-Ready report within 90 days after end of technical effort.
- e. Require a Word-Processing disk with camera-ready copy. The "boiler-plate" CDRL incorporating these requirements is shown in Figure A-2.
- f. To prepare for entering your technical report on the Worldwide Web, consider having the contractor provide a disk in HTML. Remember, however that only Distribution A (unclassified, unlimited) documents should go on the Web. Proprietary information should not be exposed to this system.

You can save a great deal of time and trouble if you find out who your author is as soon as you can. Mail that author a copy of our Handbook for Authors of Technical Reports. Figure A-3 shows a form letter to transmit this handbook. This early contact will help to ensure that you get a quality product the first time and will save time and money for both you and the contractor..

SECTION IV FORMAT REQUIREMENTS FOR TECHNICAL REPORT

ANSI/NISO Z .39.18-1995 is a loosely structured guide to the general format and organization of the technical report. It accepts a variety of formats and even limited versions of decimal format, as well as providing specifications for numbering of technical reports, cover designs, and front matter. The flexible design is intentional, so that individual requirements can be met.

FRONT MATTER

In general, here are the requirements for front matter

Front cover)
Notice page (inside front cover)
SF 298 (pages i and ii
Preface (page iii)
Executive Summary (page v)
Table of Contents
List of Figures
List of Tables
Glossary (if needed)

The basic *Front Cover* design can be made available on power point and all you have to do to design your cover is change the information. Figures B-4, B-5, and B-6 show the common limitation statements used on the front cover.

The *Notice Page* describes information contained in the technical report in terms of restrictions, releasability and review of the document. This page indicates that publication has been approved and is signed by the project manager and his or her immediate supervisor. Formats for all types of Notice Page can be placed in your computer. Figures B-7,B-8, and B-9 show examples of common notice pages.

The *SF 298* is used to transmit the technical report to Defense Technical Information Center. Block-by-block instructions for the form will be included with the form. This can also be made available on your computer.

The *Preface* will include information about the report not normally found in either the Notice Page or the SF 298. This is the place to include such information as acknowledgments, names of principal investigator, etc. The different Preface formats for standard technical reports, as well as those for theses, summer faculty, or postdoctoral reports can be made available on your computer

Your contractor can provide the following items:

a. *Executive Summary*. A short, layperson-oriented *Executive Summary* of the report will make it easier for your readers. Be sure to Include such information as objective, background, methodology, results, conclusions, and recommendations. Be sure to state what we did, why we did it, how we did it, what we found, what our findings mean, and who can use the research.

Your *Table of Contents* does not have to be so exhaustive as to cover fourth- and fifth-order headings; however the titles of topics listed should be specific enough to be of use to the busy reader.

A *List of Figures* and List of Tables should be provided if you have over three of either.

A *Glossary* can be used if you have many acronyms or difficult terms that may not always be identified in the context of the text.and you feel that your reader needs this.

ORGANIZATION OF TEXT

A variety of formats are acceptable and the general organization of the technical report will depend on the nature of the work and what you are trying to present. Regardless of which format you choose, you can make it easier for the reader if you follow the instructions below:

Organize your material into sections, starting each section on a separate page. The first section will always be the *Introduction*, and the last section will be either *Conclusions or Recommendations*. The section titles for the body of the report will be dictated by your topical organization.

Introduction

The Introduction is most important because it sets your reader up for what is to follow. For this reason it makes sense to divide your introduction into Objective, Background, and Scope.

Objective. The objective should be first and clearly labeled, using plain English to explain the purpose of the research.. Subobjectives may also be listed here. Please do not make the reader search for the objective.

Background. Give your readers just enough information to be able to read and understand the report. Do not assume that a general readership will understand the problems addressed or know what attempts have been made to solve it. Keep it as short as possible, but, when in doubt provide the information.

Scope/Approach. This section can help the reader to better understand the report and to know what was done, and even perhaps what was left our. If there is anything unusual about the arrangement of material, here is a good place to explain it.

Body or Exposition

The body or exposition will usually consist of several sections, depending on the nature of the report. For example, you could have individual sections entitled Methodology, Test Plan, Results, etc., as needed.

Conclusions/Recommendations

Although not all research will result in Recommendations, it is hard to imagine an acceptable technical report without a conclusion. Again, you can write your report so that a busy reader can read Executive Summary, Introduction, and Conclusions and leave the rest of the report to be read at leisure.

ILLUSTRATIVE MATERIAL

The old cliché that one picture is worth a thousand words is not always true; however, your illustrative material can be the key to acceptability of your report by the Defense Technical Information Center. In particular, be sure that your illustrations are professionally lettered, that your original photographs are halftones, and that the lettering in reduced figures is still large enough to retain its integrity with reproduction from a microfiche copy. Also be sure that your titles are accurate, uniform, and consistent.

REFERENCES

There are several acceptable methods of citing references. One of the easiest and most widely accepted is the author-date method, e.g., (Goatson, 1995). This is especially practical when multiple authors are writing the technical report because it provides a uniform numbering system and uses an alphabetical Reference List.

Whichever method you use for listing the references, be consistent in the use of internal punctuation, and in the order of the information included..

APPENDIXES

Appendixes (or appendices) are used at the end of a document to:

- 1. include information that would be of interest to only a few readers.
- 2. Avoid distracting the reader with excessive theory and background information.
- 3. Separate software user's manuals from the text.
- 4. Make it more convenient for the reader to deal with similar computer runs, figures, and tables that, if included in the text, might impede logical assimilation of information.
- 5. Separate unclassified information and cut down on the size of classified technical reports.

If Appendixes are necessary, a few basic rules apply:

- 1. Appendixes should be labeled with capital letters of the alphabet, as in Appendix A, B, C, etc.
- 2. Appendix figures, tables, and equations should be numbered according to the appendix in which they occur. Examples: Figure A-1, Table B-2, Equation (C-3).
- 3. Appendix pages should be numbered with Arabic numerals. If in one volume, the numbering system should continue after the last text page.
- 4. If there is no text on an appendix title page, this page should be odd-numbered so that it will not appear in print as a left-hand page with no text on it. This distracts the reader and makes you look ridiculous.
- 5. Do not number appendix pages according to the appendix, This can drive printers crazy.

MULTIVOLUME TECHNICAL REPORTS

Sometimes page limitations and sheer bulk will necessitate breaking a technical report into more than one volume. At other times, all readers may not need all the information, although some will. Also sometimes we can publish a short classified volume and put unclassified information in another volume, cutting down on classified material that must be marked and handled.

Whenever you publish a technical report in two or more volumes, each will have the same front matter, except that:

- 1. The cover and SF 298 will contain the separate subtitles of that volume and will indicate both the volume number and the number of volumes contained in the report.
- 2. The table of contents for each volume will indicate only that material contained in that volume.
 - 3. Each volume break will occur at a logical point in the text.

MULTIPART TECHNICAL REPORTS

Sometimes a technical report has too many pages for printing requirements and there is no logical way to break this report into volumes. In this case, we can publish the report in two or more parts with pages numbered consecutively throughout. In this case the cover and SF 298 will list the numbers of pages contained within each part (for example, Part 1, Pages 1-350)

SECTION V. WHAT DO I DO WITH THIS TECHNICAL REPORT?

ASSIGN IT A NUMBER

Having included all the technical report requirements in your contract and having sent your author all the format requirements, you probably feel very proud of yourself by now, All of a sudden, a draft copy arrives in the mail from your contractor. Now you start wondering what to do next. There are a number of things to be considered at this point but the first thing to remember is that you have 30 days to edit the report and return it to the contractor. If you decide to make use of your time, the immediate thing to do is to assign it an alphanumeric number that includes the letters of your laboratory, indication that it is a TR, the year, and the number of the report within that year. For example AL/EQ-TR-1997-0003. This number will appear on the SF 298 and in the upper left-hand corner of the report cover. The numbering system will be described in a separate section.

As far as we can determine, all technical reports published after 1 October 1997 or whenever the realignment takes effect will be an ML and will use both an ML number and an ML cover. Those reports still in the system that have been edited as AL/EQ reports (assigned AL/EQ numbers) will require an Armstrong Laboratory Cover. An example is shown in Figure B-1. The templates for this cover are available in PowerPoint.

At this time, we do not know if ML will let us use our own numbering system (MLQ) or if they will assign us a block of ML numbers. The STINFO focal point will help you with this part of processing the report, by assigning the number. The number and title should be entered in your Work Unit Information Center. At this time, we do not have a format for an ML cover, but your STINFO focal point can obtain a template as soon as one is available.

EDIT THE REPORT

The next step is editing the report. If it is an SBIR Phase I report, only cursory editing is required. This means that you examine the quality of the illustrations, the organization, marking of proprietary material, and make limited suggestions to improve the technical content. This is largely because of the small amount of money available to the author. Other technical reports will require a complete and comprehensive edit. In any case, if you want a high-quality Phase I SBIR Technical Report, you have to provide the author with advance guidance. You can get exactly what you ask for, so ask for the best. Ot

After you have edited the first draft you can do one of two things, depending on how many corrections you deem necessary. If the corrections are minor, you can edit the disc on your own computer and prepare to go final. This may be easier and save a great deal of time and money. If the corrections are extensive, send the report back and give the contractor 30 days to make the corrections and return a camera-ready report. This decision is yours to make.

Under no circumstances should you pay the contractor until an acceptable cameraready copy has been received.

TRACKING THE REPORT

You should have a technical report tracking system in your computer. At a minimum, the entries should include the TR number, title, limitation code, contractor code, date edited, date returned to contractor, date final returned, date printed, date published, and accession number. This tells you and your supervisor the status of your TR and tracks the total time taken from end of technical effort to publication. An example of a tracking system can be found in Figure C-1.

LATE TECHNICAL REPORTS

The STINFO focal point will provide branch chiefs and the division chief with monthly listings of all late technical reports (those hat have been in the system for more than 6 months after the technical effort has ended).

ENTRY IN WUIS

The and title of your technical report should be entered immediately in your Work Unit Information Summary. This enables DTIC to track the progress and to know when to expect your report to be published.

SECTION VI - PUBLICATION PROCEDURES AND INTERFACES

STINFO AND PA REVIEWS.

After you have done your editing and are satisfied that you have a technical report ready for publishing, you then must obtain a STINFO Qualitative review and a Public Affairs Security and Policy Review, if necessary (Distribution A).. The most expeditious way to do this is outlined below:

- 1. Be sure that your final technical report contains a cover, a completed and signed notice pages and a SF 298
- 2. The next step entails at least a cursory review to assure that the report meets Defense Technical Information Center standards for publication. This means you must send it to your STINFO officer or focal point. If the report is limited distribution, this will be the final review before publication.
- 2. Next, If the report is distribution A (unclassified, unlimited) it must undergo Security and Policy Review reviewed by a cognizant Public Affairs Officer. This will determine if it is releasable to the general public.

PRINTING/PUBLISHING

Upon completion of the STINFO and Public Affairs Review, you will be ready to send your technical report for printing. The following procedures apply, if printing and processing are done locally.:

- 1. Determine how many copies you will need. Consider the mandatory requirements (DTIC, technical libraries) and additional people or agencies to whom you wish to send copies of the report.
- 2. Complete an Air Force Form 844 (See example in Figure D-1, sending the report to Base Reproductions.
 - 3. Complete a page dummy as shown in Figure D-2.
 - 4. Send to the printer.

PRIMARY DISTRIBUTION

Your technical report has now multiplied faster than two rabbits and your copies (several boxes) have arrived from the printers. The natural tendency is to ask yourself, "Self, what do we do next?" The answer is that you get rid of most of these copies through the mail or normal distribution. There is no easy way, but the following steps apply.:

- 1. Mail one copy and the disk that accompanies it to Defense Technical Information Center, complete with a self-addressed DTIC Form 50 containing information about your report. Examples are shown in Figure E-2.
 - 2. Send two copies to your technical library.
- 3. If report is Distribution A, and a widely needed report, provide HTML disc to your Webmaster for entry in Worldwide Web. If not, or if report is limited distribution, only enter the abstract in Worldwide Web.
- 4. Save copies of SF 298 for entry on Worldwide Web as abstracts, even if the report has limited distribution.
- 5. Address and mail the copies of technical report.. Figure E-3 shows Standard Distribution List.
 - 6. Put a copy of the technical report in your Project Case Folder.
 - 7. Update WUIS to show that this Technical Report has been published.
 - 8, Place a hard copy of published technical report in Project Manager's case folder.

AM I FINISHED? NOT QUITE

You are now finised with your technical report, except for one thing. Remember the Self-addressed DTIC Form 50 that you completed and sent to DTIC. Someone at DTIC will assign an accession number and send this small card form back to you. Here is what you need to do.

- 1. Enter the accession number in your tracking system, your WUIS, and on the Technical Report in your Project Manager's Case Folder
 - 2. Send complete DTIC Form 50 to your technical library.

ANNOTATED REFERENCE LIST

The references listed below will help you in editing and assembling your technical report for publication.

AF Instruction 61-202A *Air Force Technical Publications Program*. Outlines Air Force Standards for Technical Publications.

AL/EQ-HBK-61-202A Project Manager;s Guide to the Scientific and Technical Information (STINFO) Program and Technical Publications Process. Although we are no longer a part of Armstrong Laboratory, the basic STINFO Program remains the same; therefore this handbook still contains some good information.

AL/EQ-HBK-61-202B *A Handbook for Author's of Technical Reports*. This handbook provides explicit guidance for writing the technical report. This needs to go to your author as soon as possible.

American National Standard Z39.18-1995. *Scientific and Technical Reports-- Elements*, *Organization*, *and Design*. This publication offers valuable and flexible guidance on all aspects of writing and preparing scientific and technical reports. Best used when augmented and amplified by the Handbook for Authors.

Wright Laboratory Guide to Technical Publishing. For use only when you send the reports through the ML STINFO Officer for processing. Your STINFO focal point will provide a copy of this book.

APPENDIX A. PREPUBLICATION

This appendix contains examples of the documents and forms needed to assure the careful planning and coordination needed to assure timely publication of a high quality technical report. It includes contract documents and the letter establishing initial contact with the author and attaching an author's handbook.

Form Approved OMB No. 0704-0188 DATA ITEM DESCRIPTION 2. IDENTIFICATION NUMBER 1. TITUS DI-MISC -80711 Scientific and Technical Reports 3. DESCRIPTION/PURPOSE 3.1 Scientific and Technical Reports describs and disseminate to the analytical, scientific and technical community the precise nature and results of analytical studies, research, development, test and evaluation (RDT&E) on an assigned task(s). Scientific and Technical Reports may be definitive for the subject presented, exploratory in nature, or an evaluation of critical subsystem or of technical problems. 68. DTIC APPLICABLE 66. GIDEP APPLICABLE 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) 4. APPROVAL DATE (YYMMDD) X R/DD 881202 7. APPLICATION/INTERRELATIONSHIP 7.1 This DID contains the format requirements and preparation instructions for the information product generated by the specific and discrete task requirement as delineated in the contract. 7.2 This DID is applicable to the organization, preparation and production of technical publications. 7.3 This DID supersedes UDI-8-23272C, DI-8-4057 and DI-8-3591A. 7.4 Defense Technical Information Center (DTIC) Cameron Station Alexandria, VA 22304-6145 9a. APPLICABLE FORMS 96. AMSC NUMBER 8. APPROVAL LIMITATION S4578 SF 298. 10. PREPARATION INSTRUCTIONS 10.1 Reference document. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisisions, shall be as specified in the contract. 10.2 Document format shall be in accordance with ANSI 239.18 Scientific and Technical Reports: Organization, Preparation and Production. 10.3 Document content shall be clearly written, describe accomplishments and other facts adequately and with no technical errors, and be acceptable for release. If Scientific and Technical Reports when sent to DTIC are marked unclassified unlimited they should be accompanied by a letter certifying that they have been cleared for public release and sale; to include foreign nationals.

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

DD Form 1664, MAR 87

Jun 86 edition may be used until exhausted.

Page 1 of 1 Pages

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DATA ITEM DESCRIPTION

April Approved
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STILL PHOTO COVERAGE

T. STRYPICATION NUMBER

DI-MISC-80169

S. BESCHICKSON

3.1 Still photo coverage provides the Government with visual records to observe, analyze, and evaluate overall and specific elements of program development and progress. These records provide a pictorial medium for the exchange of technical

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7. APPLIATION/INTERPLATIONSHIP
7.1 This data item description (DID) contains the format and content preparation instructions for still photographic prints and negatives required by 3.4 of DOD-T-29055 (TD).

7.2 This data item is designed for contracts involving RDT&E activity when events of interest to Government management are anticipated.

(Continued on page 2)

8. APPROVAL LIMITATION 90. APPLICABLE FORMS 90 AMSC NUMBER N3850

10. PREPARATION INSTRUCTIONS

- 10.1 Source document. The applicable issue of the document cited herein, including its approval date and dates of any applicable amendments and revisions, shall be as reflected in the contract.
- 10.2 The items prepared will be 4x5-inch (10.2x12.7 centimeters (cm)) black and white and/or color original negatives with two matching proof prints. Contractors will include color photography suitable for high quality reproduction of program highlights only. Color photography will be exposed on 4x5-inch (10.2x12.7cm) film. When negative color material is used, the original color negative and one matching positive color transparency will be included. Contractors may furnish still photography in sizes other than described above only when approved by the procuring contracting officer.
- 10.3 <u>Identification</u>. Contractors will letter the following data in the widest clear margin of the negative or transparency on the acetate side starting from the left: Negative number, calendar year, contractor, security classification, and automatic time-phased downgrading notation.
- 10.3.1 No lettering will appear on the exposed picture area. If necessary, prepare and include a transparent title strip.
- 10.3.2 Assign negative numbers in sequence starting with number i at the beginning of each calendar year.
- 10.3.3 Place each black-and-white negative in a separate negative preserver. Color materials will be placed in separate protective transparent sleeves and placed inside separate negative preservers.

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PAGE 1 OF 2 PAGES

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DEPARTMENT OF THE AIR FORCE

ARMSTRONG LABORATORY (AFMC)
TYNDALL AIR FORCE BASE, FLORIDA

AL/EQPP (STINFO) 139 Barnes Drive, Suite 2 Tyndall AFB FL 32403-523

16 Dec 93

Dr Michael D. Overham ADA Technologies, Inc. 304 Inverness Way, South Englewood, CO 80112

Dear Dr. Overham

We have been notified by Dr Joseph Wander that you will be producing at least one technical report for our Armstrong Laboratory Environics Directorate. As Scientific and Technical Information Program Manager, I am interested in timely and cost-effective sharing of information with the worldwide research and development community.

To make you aware of our stylistic requirements and to help you prepare your technical reports, I am attaching a copy of AL/EQ HBK-61-202B. "Handbook fo Authors of Technical Reports." Using this handbook from preparation of the initial draft through production of a camera-ready copy should make both your job and mine easier.

I am also the Laboratory Technical Editor. If I can assist you at any time during preparation of this report, please feel free to call me at (904) 283-6259.

LARRY L. TESTERMAN Scientific and Technical Information Program Manager

1 Atch: Handbook

A=4 STINFO Program Manager Letter to Contract Authors

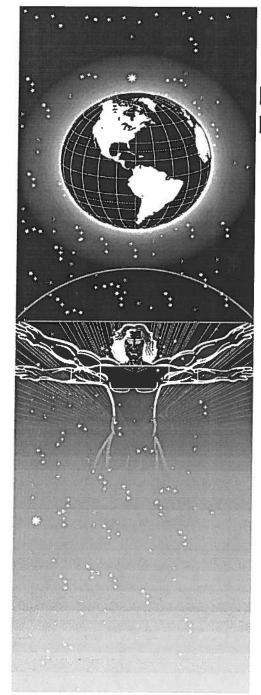
APPENDIX B. EXAMPLES OF PARTS OF A TECHNICAL REPORT

This appendix provides real examples of the cover, notice pages and SF 298. Other examples such as text pages, illustrations, reference list, and other parts of the technical report.are found in AL/EQ-HBK-61-202B, Handbook for Authors of Technical Reports. That handbook should still be gooed, even for ML.

The examples of the cover and notice page included in this appendix will only apply to those Armstrong Laboratory reports already in the syste. Examples for ML reports, with templated examples will be provided by your STINFO focal point as soon as this information becomes available.

AL/EQ-TP-1997-0017

UNITED STATES AIR FORCE ARMSTRONG LABORATORY



Field and Laboratory Studies of Pulsed Pumping For Cleanup of Contaminated Aquifers

Douglas M. McKay, R. D. Wilson, M. J. Brown, William P. Ball, Donald P. Durfee, Gushou Zia, and Chongxuan Liu

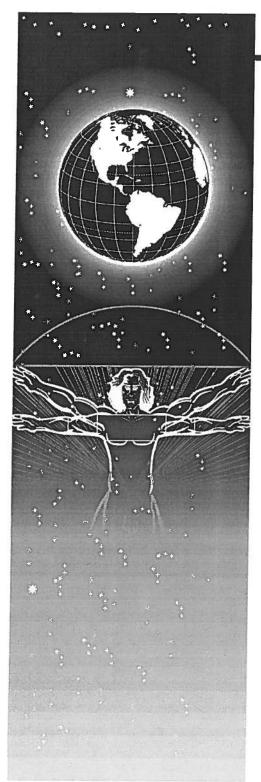
Department of Earth Sciences
University of Waterloo
Waterloo, Ontario, N2L 3GI, Canada

Department of Geography and Chemical Engineering
The Johns Hopkins University
313 Ames Hall, Baltimore Maryland, 21218

July 1997

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Environics Directorate Environmental Risk Management Division 139 Barnes Drive, Suite 2 Tyndall Air Force Base FL 32403-5323



UNITED STATES AIR FORCE ARMSTRONG LABORATORY

Combined Corona/Catalyst Process for Low-Temperature NOx Control

Dennis J. Helfritch and Paul L. Feldman

ENVIRONMENTAL ELEMENTS CORPORATION 3700 Koppers Street Baltimore, MD 21227

April 1997

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Figure B-2

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FOR THE COMMANDER:

DENNIS O'SULLIVAN, 1Lt, USAF, BSC Project Manager

ALLAN M. WEINER, Lt Col, USAF Chief, Environmental Risk Management

Figure B-3

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MARK H. VANBENTHEM, Maj, USAF Chief, Risk Assessment Technology Division

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This report has been reviewed and is approved for publication.

FOR THE COMMANDER:

JOSEPH D. WANDER, PhD Project Manager ALLAN M. WEINER, Lt Col, USAF Chief, Environmental Risk Management Division

REPORT DOCUMENTATION PAGE

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	13. ABSTRACT (Maximum 200 words)			

The objective of this Phase I SBIR project was to determine the best operating configuration of a technology for multiple oxidation of nitric oxide at low temperature and concentration. The technology consisted of a catalyst section to provide oxidation from NO to NO₂ followde by a corona discharge to yield oxidation form NO₂ to higher oxides. The corona discharge was designed to also illuminate the catalyst and activate it at these low temperatures. A benchscale test program was carried out to demonstrate the concept. The results showed that greater than 90% oxidation of NO to NO₂ can be achieved at modrate power expenditure, but that less than 30% of the NO₂ so created can be subsequently converted to higher oxides. It was found that, although the radicals produced by the discharge are strong oxidizers, they are also capable of reducing NO⁺². Since ozone in the absence of O an OH is known to drive NO to the higher oxides that are sought, additional experiments were carried out to document this capability. These expreiments showed that nitric oxide can be converted to a readily scrubbed higher oxide by the combination of corona discharge, followed by ozone injection.

14. SUBJECT TERMS			
Nitrogen Oxide, Corona Dis	15. NUMBER OF PAGES		
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE		20. LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UL

APPENDIX C: STINFO QUALITATIVE REVIEW CHECKLIST

The STINFO Officer or STINFO focal point will use this checklist to perform a qualitative review of your technical report. Keep in mind that the STINFO focal point is not an editor. All editing must be done before this person receives the camera-ready copy. Here are the things that will be covered.

FRONT MATTER

Cover
Constructed according to example shown in Appendix
Notice Page (Inside Front Cover)
Appropriate notices, including distribution and review statementSignature of at least project manager and immediate supervisor
SF 298 (page I & ii)
Technical Report TitleDate of ReportType of Report and date covered
Author(s)Contract and Funding Numbers to include JON and WUIS NumbersAddresses of Performing and Monitoring AgenciesTechnical Report NumbersSupplementary Notes. Include Project Manager name and Telephone NumberDistribution Statement. Complete StatementDistribution CodeAbstractKey Words
Preface (page iii)
Contract, thesis, or summer faculty information as appropriate

Period covered Project managers Acknowledgements
Executive Summary (page v)
Addresses objective, background, scope, methodology, results, conclusions and recommendations
Table of Contents
Starts on righthand page
Other front matter
List of FiguresList of TablesGlossary
Page Numbering
Centered, at bottom of page Lower-case Roman numerals for front matter Arabic numerals, consecutive for text and appendices Not according to appendix or section
Text (page 1)
Introduction contains objective, background, scopeMethodologyResultsConclusions
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Each document referred to is cited in textAll Reference listings contain complete informationTitles of Journal Articles set off in quotation marks. Commas and periods go inside quotes.

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BACK MATTER
Appendices
First title page on right-hand (odd-numbered) pageSeparate title pages on right-hand (odd-numbered) pagesFigures, tables, and equations numbered according to appendixPages numbered in Arabic, consecutively from last page of text. Not according to appendix.
ILLUSTRATIVE MATERIAL
Photographs Must be halftonesShould be high-contrast, preferably black and whiteLegible reproductionTypeface must have integrity. No dot matrix. No reduced blueprintsNo foldoutsNo crude artwork or hand letteringNo copyrighted material without author's or publisher's permission
OTHER
SBIR Reports
Proprietary pages stamped at top and bottom Contractor format acceptable Can be public release if written permission of contractor is obtained. Distribution B (U.S. Government Agencies only, with 5-year limitation)

APPENDIX D. PROCESSING THE TECHNICAL REPORT FOR PRINTING

Preparing the technical report for printing requires is a fairly easy process but certain forms and procedures must be required. First, unless there is a valid reason to limit distribution of the document, (such as proprietary content of SBIR reports) you must obtain a security and policy review. This is done by your servicing public affairs office (In this case ASC/PA at Wright-Patterson AFB.. Then you must prepare an AF Form 844 and a page dummy. Examples of these requests and forms are shown here.

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Figure D-2

DTIC FORM 50: BOTH SIDES

ATTN: DTIC-OMI
DEFENSE TECHNICAL
INFORMATION CENTER
8725 John J Kingman Rd STE 0944
Ft Belvoir VA 22060-6218

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

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AL/EQ 139 Barnes Drive, Suite 2 Tyndall AFB FL 32403-5323 OFFICIAL BUSINESS

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AD NUMBER	DATE *17APRIL97	DTIC ACCESSION NOTICE
1. REPORT IDENTIFYING INFORMATION A. ORIGINATING AGENCY ARMSTRO TECH EDITING, TAFB FL 32404 B. REPORT TITLE AND/OR NUMBER Surfactant-Enhanced Sorption a C. MONITOR REPORT NUMBER	Cationic	REQUESTER: 1. Put your mailing address on reverse of form. 2. Complete items 1 and 2. 3. Attach form to reports mailed to DTIC. 4. Use unclassified
AL/EQ-TR-1996-0054 D. PREPARED UNDER CONTRACT F08635-93-C-0020 2. DISTRIBUTION STATEMENT Appro	information only. 5. Do not order document for 6 to 8 weeks. DTIC:	
release; distribution unlimite	d.	Assign AD Number. Return to requester.
DTIC Form 50 OCT 95	PREVIOUS EDIT	IONS ARE OBSOLETE

Figure D-3

APPENDIX E. PRIMARY DISTRIBUTION OF TECHNICAL REPORTS

After the report has been printed, it is your responsibility to make primary distribution to Defense Technical Information Center and all other interested agencies. This appendix shows you how to complete a DTIC Form 50 and provides a list of addresses for standard or routine distribution. You may add addresses, depending on the nature of and need for the report.

Defense Technical Information Center 8725 John J. Kingman Rd., STE 0944 Ft. Belvior, VA 22060-6218

AL/XPTT Attn: Ms Williams 2509 Kennedy Circle Brooks AFB TX 78235-5118

AL/DOKL 2511 Kennedy Circle Brooks AFB TX 78235-5122

AL/OEM 2402 E. Drive Brooks AFB TX 78235-5215

AL/OEB 2402 E. Drive Brooks AFB TX 78235-5215

AFCEE 8106 Chennault Road Brooks AFB TX 78235-5318

AL/XPTT 2509 Kennedy Circle Brooks AFB TX 78235-5118

AL/XPTM Attn: Capt Smith 2509 Kennedy Circle Brooks AFB TX 78235-5118

AUL/LSE 600 Chennault Circle Maxwell AFB AL 36112-6843

Test CO - 203 West Eglin Blvd Ste 300 Eglin AFB, FL 32542-6843 HSC/XRE 2510 Kennedy Circle, Suite 1 Brooks AFB, TX 78235-5120

AL/XPTT Attn: Mr Blair 2509 Kennedy Circle Brooks AFB TX 78235-5118

APPENDIX F. SECURITY AND POLICY REVIEW

All technical reports and other technical documents must undergo Security and Policy Review by a cognizant Public Affairs Office before public release. In this case, the Public Affairs Office will be ASC/PA. The necessary procedures, forms, and points of contact are shown in this appendix.

ASC/WPAFB Security and Policy Review

Office of Public Affairs



THE NEED AND RIGHT TO KNOW: The public has the need and right to know the military capabilities and potential of our nation. This, however, is limited by the need to prevent compromise of national security and safety. The military security and policy review system was created to safeguard both the public rights and our national security. It is a service provided to ensure that

information about our national security is released quickly but without divulging classified or policy data. It also ensures that information will be technically accurate, free of information about critical military technology and conforms to Department of Defense and military service policies.

SELECT THE CATEGORY WHICH MEETS YOUR SPECIFIC REQUEST:

All WPAFB Home Page Requests On-Line	All WPAFB Contractor Requests	All WPAFB Software Release Requests	All Other WPAFB Requests	
◆ Guidelines (WPAFB Only)	Instructions .DOC .HTML	Policy Guidance .DOC .HTML	Instructions DOC HTML	
Request Form (WPAFB Only)	Request Form .DOC .HTML	Request Form DOC HTML	Request Form .DOC .HTML	

WPAFB Home ASC/PA Info Page

DISCLAIMER: This Government Computer System is provided as a public service by the 88th Communications Group. It is intended to be used by the public for viewing and retrieving information only. Unauthorized attempts to upload information or change information on this service are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986. Unless otherwise indicated all information on this system is considered public information and may be distributed or copied.

Send your security and policy review questions and comments to paweb@asc.wpafb.af.mil

SECURITY & POLICY REVIEW - CLEARANCE FOR PUBLIC RELEASE INTERNALLY GENERATED MATERIAL

as of 1/1/97

NOTE: If your material is for presentation at closed or classified meetings, <u>do not</u> submit for security and policy review.

WHAT TO SUBMIT

Request for public release approval letter (original and one copy) Two copies of material being submitted for review, UNLESS material must be reviewed by higher headquarters (see reverse), is co-sponsored, or is funded by ARPA, BMDO, etc. In these cases, 11 copies of the material must be submitted. However, if DARPA has transferred the management responsibility to a Wright-Patt organization, only two copies of the material are required.

WHEN TO SUBMIT - MINIMUM LEAD TIMES

15 working days prior to date of presentation, publication, or intended release, if material can be cleared at this level

35 working days in advance for items to be released in Washington D.C. area, or in other instances where higher headquarters' review will be required (see reverse of this page for further instructions)

REQUEST FOR PUBLIC RELEASE APPROVAL LETTER

A cover letter must be submitted with your request—using your organization's letterhead. A form letter will be provided from our office for your use. We need this form letter filled out in its entirety; it can be hand-written, if legible. This letter must be submitted in its original form with original signatures, plus one copy. The author cannot sign out their own material for submittal. This letter MUST be signed out at division level or equivalent. Wright Laboratory personnel - check to see if your chief scientist needs to review and sign.

UNAUTHORIZED RELEASE OF TECHNICAL DATA

Abstracts, technical papers, journal articles, conferences and presentations, etc. intended for release in any public forum must be approved by the Office of Public Affairs <u>PRIOR</u> to actual release. This means it cannot be released to conference chairmen, selection committees, publishers, or anyone else outside the DoD until it has been approved. Material that has been released outside the DoD is in the public domain and any further action by ASC/PA would be inappropriate. Such requests will be returned without action.

ABSTRACTS

Remember the clearance of an abstract is just that. It does not clear, authorize or imply clearance of the main presentation. That material must also be submitted and cleared properly.

BRIEFINGS/PRESENTATIONS

We cannot accept visuals for clearance without the accompanying text. Releasability can be determined only on the basis of the review of the complete presentation. Submittal of notes or outlines, vugraphs or slides alone is unacceptable and such packages will be returned without action.

VIDEOTAPES

When submitting videotapes for clearance, provide <u>three</u> copies. We also need <u>11 copies</u> of the complete script. If there is no audio, you must provide a scene description.

SOFTWARE RELEASE

Requests for clearance of computer software (source and/or object code inclusive) must be submitted in compliance with the ASC Software Release Policy Guidance Memorandum, 22 Dec 95. The guidance and form letter can be obtained by either contact ASC/PA (52776) or on the Wright-Patt Home Page under "Software Release Requests."

USE OF PREVIOUSLY CLEARED MATERIAL

Material may be used from a single-cleared source as long as no technical content is added WITHOUT RESUBMITTING IT FOR APPROVAL. For example, someone has cleared and published a journal article and is now asked to give a presentation based on that article. No further review is required if <u>ALL</u> the material is extracted from that single article. However, if the author gathers the content from several previously cleared sources, he/she, then, has a new document/presentation which <u>MUST</u> be submitted for clearance. When portions of a submittal have been previously cleared, identify those portions and furnish appropriate case numbers/dates.

JOINTLY AUTHORED PAPERS

Sometimes one of our in-house writers will co-author a paper with a contractor author. When this happens, one author should decide who will submit the request for public release approval in order to avoid duplicate requests which needlessly consume time and energy. So, check with the co-author before submitting a request. This should preclude duplication.

We are seeing more and more jointly funded programs. If another service or agency is involved, they need to see the material. We cannot speak for them. If jointly funded/co-authored by other government entities (i.e., Army, Navy, NASA, DARPA, etc.), obtain their coordination and attach the signed statement, authorizing public release of this information, to the request.

DON'T SEND "DRAFT" COPY

All copy submitted for security/policy review must be complete, final copy. Papers marked "Working Copy," "Draft," or "Preliminary Copy," aren't considered final. I'm talking content—not format. Once approved, you may not revise the technical content unless you re-submit the material. Please submit only final copy, and do not mark anything "Draft." Photos or figures must be clear and legible—most fax copies are not clear enough to be acceptable.

R&D APPLICATIONS--OTHER AGENCIES/SERVICES/PROGRAMS

If you have submitted material for public release that discusses other programs (e.g., JPATS, F-22, C-17), those offices must review. ASC/PA will obtain the necessary coordination and review from the cognizant office.

EXISTING DOCUMENTS CONTAINING RESTRICTIVE STATEMENTS

If the material reflects a limited statement and/or Export Control Statements and the Office of Primary Responsibility (OPR) determines public release approval is necessary, the statements must be removed prior to submitting to ASC/PA Security and Policy Review. That responsibility belongs to the controlling office. ASC/PA has no authority to remove such statements; therefore, submittals with such statements will be returned without action.

REFERENCES

Classified references, while not forbidden, are not recommended because they provide intelligence "shopping lists" and are not available to the general public.

6.1 FUNDED MATERIAL (BASIC RESEARCH)

University/Industry--No restrictions will be placed on the conduct or reporting of unclassified contracted research that is (a) funded by DoD budget category 6.1 (basic research), whether performed by universities or industry or (b) funded by DoD budget category 6.2 (exploratory development) and performed on campus at a university, but for those rare exceptions where there is a high likelihood of disclosing performance characteristics of military systems, or of manufacturing technologies that are unique and critical to defense. Exception to this policy:

- ** Papers which are jointly authored by university and in-house laboratories (Air Force member/DoD civilian). Under those circumstances, the material must be cleared for open publication through Public Affairs channels, even if it constitutes "basic research."
- ** Clearance of technical reports for submission to the National Technical Information Services (NTIS) under distribution statement "A" (cleared for public release, distribution is unlimited). All intended for Statement "A" distribution <u>must</u> be processed through Public Affairs channels, and should be cleared at the lowest echelon possible.

DOD POLICY ON ACADEMIC FREEDOM—DoDD 5230.9, date 9 Apr 96

To ensure a climate of academic freedom and to encourage intellectual expression, students (including midshipmen and cadets) and faculty members (DoD civilian or military) of an academy, college, university or DoD school are not required to submit for review papers or materials that are prepared in response to academic requirements and not intended for release outside the academic institution. Information that is intended for public access shall be submitted for review. Clearance shall be granted if classified information is not disclosed, the DoD interests in nonclassified areas are not jeopardized, and the author accurately portrays official policy, even if the author takes issue with that policy.

NATO AGARD MEETINGS

NATO AGARD meetings are for AGARD panel members only; therefore, presentations/publications do not require public release approval. This material should be processed through the Foreign Disclosure Office.

COPYRIGHT AND AIR FORCE AUTHORS: The law governing the placement of government work in the public domain ensures citizens free access to government-related information. Work prepared by an employee of the U.S. government as part of that person's official duties cannot be copyrighted. The key is determining whether or not the submitted material was prepared as part of the author's official duties. If the material was developed through the employee's own initiative, outside his or her duties, even though the subject matter involves the professional field of the author, it may be copyrighted. However, a thesis prepared for a degree requirement can fall into the realm of government work if the employee's "official duty" is to attend school. Questions concerning "to copyright" or "not to copyright" should be directed to AFMC LO/JAZ. Consider copyright law when releasing co-authored material on to the Internet.

HIGHER HEADQUARTERS REVIEW

Generally, information must be reviewed and cleared at higher headquarters if it:

- Originates, or is proposed for release, at the seat of the U.S. Government. (This includes displays, exhibits, speeches, etc., but usually does not apply to technical papers intended for presentation at conferences and meetings.)
- Is, or has the potential to become, an item of national interest or has foreign policy implications.
- Concerns high-level military, DOD, or U.S. Government policy.
- Concerns subjects of potential controversy among DOD components or with other federal agencies.
- Concerns the following subject areas:
 - New weapons, weapon systems, or significant modifications or improvements to existing weapons or systems, equipment, or techniques.
 - Military operations, operations security, potential operations, and significant exercises.
 - National command authorities and command posts.
 - Military applications in space; nuclear weapons, including weapon effects research; chemical warfare; defense biological and toxin research; and high-energy lasers and particle beam technology.
 - Material, including that submitted by defense contractors, involving critical military technology.
 - Others as OATSD/PA may designate.

A TOPOLOGICAL STATES OF SALES

DEPARTMENT OF THE AIR FORCE

WRIGHT LABORATORY (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE OHIO



MEMORANDUM FOR ASC/PA

FROM:			AND TO	2
SUBJECT: Request for Public Release Approva	ıl (AFI 35-205)			
1. Please review the attached material for public provided in support of this request:	release approva	I. The follow	ving informatio	on is
a. CONTRACT # and company name Contains DD 254 Refers to Security Classification Gu b. TYPE OF INFORMATION: (tech report, etc.):	ide nical paper, jou		bstract, technic	
Internet Requests: When requesting public release the WPAFB WWW server. The on-line form to su <a "http:="" asc="" ascpa="" home="" href="http://www.wpafb.af.mil/ascpa/secrevw/rr/release-following links: the Wright-Patt Home Page, ASC " http:="" links:="" page,="" page,<="" release-following="" rr="" secrevw="" th="" the="" wright-patt="" www.wpafb.af.mil=""><th>ibmit the request -reauest.html. or</th><th>is available</th><th>at ess this form by</th><th>navigating the</th>	ibmit the request -reauest.html. or	is available	at ess this form by	navigating the
c. PRESENTATION TO (i.e., for conorganization or technical society, location (city &	nferences or preaches state), and exa	sentations, gi ct date) (BE	ve sponsoring SPECIFIC)	
NOTE: FOR CLOSED SESSIONS PUBLICATION AND/OR SUBMI				
e. TITLE:				
f. AUTHOR(S): (name, title, organiza	ation):			<u> </u>
g. If co-authored by other governmentetc.), obtain their coordination and attach the this information, to this request.	nt entities (i.e., a signed stateme	Army, Navy nt, authorizi	, NASA, DAR	PA, ase of
2. The information contained in this material is briefing charts/videos and scripts.	compete with f	gures/legibl	e photos/text v	with
ASC/PA APPROVAL	(Division level	signature/tit	tle)	

3. This information is unclassified, technically accurate, nonproprietary and considered suitable for public release. It contains no computer software, owned or developed by or for the government. Export restrictions (i.e., MCTL, Munitions List (ITAR) and CCL) and current AF/DoD policy have been considered prior to requesting public release approval.					
4. Check all that apply to references—sign and date:					
() All references are unclassified/unlimited and are available to the public.					
() References # are subject to distribution limitation. No limited information from these references is included in this document being submitted for clearance.					
() No references are contained in attached material.					
Signature of requester Date					
5. The technology contained in this material submitted for release:					
a. Is (circle all that apply)					
(1) being applied,(2) nearing application (maturing),(3) years or more away from application					
b. Resulted from technical efforts funded under Program Element (identify PE, i.e., 6.1, 6.2, 6.3, etc.).					
DARPA FUNDED, has management responsibility been transferred to a					
Wright-Patt organization? Yes No					
SMALL BUSINESS (SBIR) FUNDED (6.5), is contractor waiver letter on file granting permission to release information? Yes No					
6. Government point of contact (name, symbol, and telephone):					
NOTE: The final clearance will be mailed to the individual indicated above. If you wish the material to go to someone who tracks suspenses/materials submitted, please indicate that below. This will insure that the proper person receives this clearance material and expedites your submittals. Thank you.					

SOFTWARE RELEASE POLICY GUIDANCE MEMORANDUM (PUBLIC DOMAIN)

Note: This guidance does not apply to release of software pursuant to a cooperative research and development agreement (CRDA) under 15 U.S.C. 3710a, a license agreement, or other written agreement containing specific terms and conditions regarding use.

The Directorate of Freedom of Information and Security Review, Assistant to the Secretary of Defense Public Affairs, has determined that software is considered to be *information* for Public and is subject to the clearance requirements of DoD 5230-9 "Clearance of DoD Information for Public Release" and AFI 35-205 "Air Force Security & Policy Review Program." Software includes but is not limited to the system functional design, logic flow, algorithms, application programs, operating systems and support software for design, implementation, test, operation, diagnosis and repair.

The following guidelines shall be observed in clearing software for public release:

- a. Software clearance shall be handled at the lowest level of review able to competently evaluate the software and its public release affect. Policy interpretation should be referred to the next higher level of authority. ASC requires all requests, including requests by contractors, to be approved by directors of program offices and laboratory directorates or their designated representatives.
- b. All request for software release clearance must include manuals or other documentation which describe the function(s) of the software.
- c. Requests must be limited to non-sensitive research and development software, having no restrictions either to object (applications) or source code, and which may be marked "Approved for Public Release: Distribution Unlimited."
- d. Software or documentation protected by copyright, or in which the Government has Restricted Rights, Limited Rights, or government Purpose Rights, may only be released with the written permission of the software owner.
- e. Software submitted for release clearance may be subject to decompiling, listing and analysis to verify certification statements.

f. All software submitted for release clearance shall contain the following disclaimer (in uppercase) prominently marked on any software packaging and documentation, and displayed, if possible, by the software:

THIS SOFTWARE AND ANY ACCOMPANYING DOCUMENTATION IS RELEASED "AS IS." THE U.S. GOVERNMENT MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THIS SOFTWARE AND ANY ACCOMPANYING DOCUMENTATION, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL THE U.S. GOVERNMENT BE LIABLE FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE, OR INABILITY TO USE, THIS SOFTWARE OR ANY ACCOMPANYING DOCUMENTATION, EVEN IF INFORMED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES."



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AERONAUTICAL SYSTEMS CENTER (AFMC) WRIGHT-PATTERSON AIR FORCE BASE, OHIO

FROM:		
SUBJECT: Request for Public Rel	ease Approval-Software	and Documentation
Please review the attached software Memorandum). The following info	and documentation for purmation is provided in sur	ablic release approval (ASC Policy port of this request:
TITLE:		
		mance):
SOFTWARETYPE/LANGUAG		opriate Category):
TYPE	LANGUAGE	MEDIUM (MUST INCLUDE)
Engineering Applications Operating System (Hardware Interface)	FORTRAN C, C+, etc. Other (Specify)	Hard Copy (Source Listing) Program on Disk (Source or Executable)
Database Other (Specify)		
DOCUMENTATIONMUST IN documentation and how it relates to	o the software):	
PROGRAM DEVELOPED BY: Entirely by Contractor (Name Entirely by DoD Employee (Jointly by Contractor and Do Organization)	ne & Contract Number) OPR Title & Organization oD Employee (Name/Cont	n) ract Number, OPR/Title &
INTENDED USE and DATE NEI	EDED:	
ASC/PA APPROVAL		

CERTIFICATION STATEMENTS:

- 1. I certify the software is UNCLASSIFIED, non-sensitive, and appropriate for public release.
- 2. I certify the software is not subject to export restrictions, i.e., Militarily Critical Technologies List (MCTL), Munitions List-International Traffic in Arms Regulation (ITAR) and Commerce Control List (CCL).
- 3. I certify the software contains no Air Force database algorithms or other information not described in the documentation furnished with the software.
- 4. I certify that (CIRCLE LETTER OF <u>ALL</u> APPLICABLE STATEMENTS):
 - (a) The software and accompanying documentation were developed in whole or in part by U.S. Government employees as part of their official duties.
 - (b) The software and accompanying documentation were developed in whole or in part by contractor or contractor employees entirely at U.S. Government expense and the contractor or subcontractor has not asserted any copyright or other intellectual property rights to the software and documentation, or the request is being made by the contractor or subcontractor which developed the software.
 - (c) The software includes either public domain software or "freeware" software and, in the case of "freeware" software, a copy of the applicable freeware license (copy attached) accompanies the software.
 - (d) The software and accompanying documentation were developed in whole or in part at private expense and the owners of all rights in the software have indicated in writing (copy attached) that the software and documentation may be released to the general public without restriction.

5. List any additional comments	List any additional comments unique to this request which makes this software clearable:					
	The state of the s					
OPR: Name (Printed & Signed)	OFFICE SYMBOL	PHONE	DATE			
DIVISION OR EQUIVALENT: Name (Printed & Signed)	OFFICE SYMBOL	PHONE	DATE			

APPENDIX G. TRACKING THE TECHNICAL REPORT

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RECEI VED 18 AUG 97	AL/EQ-TR-1997-0024 SIX-PHASE SOIL HEATING OF THE SATURATED ZONE, DOVER AIR FORCE BASE, DELAWARE RETURNED FINAL PRINTED DISTRIBUTED 25 AUG 97
RECEI VED 19 AUG 97	AL/EQ-TR-1997-0025 DEVELOPMENT OF IMMUNOESSAY FOR THE DETECTION OF AQUEOUS FILM-FORMING FOAM (AFFF) RETURNED FINAL PRINTED DISTRIBUTED 25 AUG 97
RECEI VED 20 AUG 97	AL/EQ-TR-1997-0026 FIBER-OPTIC LONG-PERIOD GRATING SENSORS FOR THE DETECTION OF AQUEOUS FILM-FORMING (AFFF) RETURNED FINAL PRINTED DISTRIBUTED 28 AUG 97
RECEI VED 20 AUG 97	AL/EQ-TR-1997-0027 DEMONSTRATION OF STEAM INJECTION AS AN ENHANCED SOURCE REMOVAL TECHNOLOGY FOR AQUIFER RESTORATION RETURNED FINAL PRINTED DISTRIBUTED 28 AUG 97
	AL/EQ-TR-1997-0028 TECHNOLOGY AND VALIDATION OF THE SITE CHARACTERIZATION AND ANALYSIS PENETROMETER SYSTEM USING TUNABLE LASER SPECTROMETER
RECEI VED 28 AUG 97	RETURNED FINAL PRINTED DISTRIBUTED 01 SEP 97
ATHESIS RECEIVED 11 SEP 97	AL/EQ-1997-0029 NOVEL EUBACTERIUM THAT REDUCTIVELY DECHLORINATES TETRACHLORETHENE (PCE) TO ETHENE RETURNED FINAL PRINTED DISTRIBUTED 11SEP97

APPENDIX H ANSWERING DTIC QUERIES

Whenever someone orders a document from DTIC, your STINFO focal point will probably ask you if the report is releasable to the requesting person or agency. If the report is proprietary, you must ask your contractor if all or part of the information is releasable.

- a. If only part is releasable, you must create a sanaitized version. and send this forward.
- b. You and your STINFO focal point should review the report to determine whether or not the information is still restricted. If it is proprietary, the contractor must give written permission.
- c. If you determine the distribution statement should be changed to A (Public Release) you still must have Public Affairs do a security and policy review.

This appendix contains an example of a completed procedure for changing the distribution statement on a technical report.

AD-B216577 410-13137

RELEASING AGENT (Complete Section III)

1. REVIEW REQUEST. Contractor or Grantee government sponsor identification and contact point is included in Section I or II for your use, if necessary.

If approved only for specific requester identification in Section I or II:

- Check that approval block.

- Type name and title.

- Sign and enter date in Section III.

- Return to DTIC.

If approved for all DTIC users:

- Check that approval block.

- Type name and title.

- Sign and enter date in Section III.

- Return to DTIC.

(NOTE: When this block is checked the existing distribution limitation assigned to the report is retained, but you are giving DTIC the authority to release your limited document to all registered DTIC users who are cleared for the security level and subject area of the document.)

If disapproved:

- Check disapproval block.

- Type name and title.

- Sign, enter date, and explain reason for disapproval in Section III.

- Return to DTIC.

2. As directed by DDDR&E (R & AT), DoD releasing agencies should:

Complete this form and return it to DTIC within 15 days.

Re-examine the need for a limited distribution statement on this document and, if possible, authorize its removal. To document this review, a memorandum indicating that the limitation statement can be removed or explaining why it cannot be removed should also be sent to DTIC.

IF YOU NEED A COPY OF THE DOCUMENT FOR REVIEW, GIVE DTIC A CALL AND IT WILL BE PROVIDED FREE OF CHARGE. (703)767-8271; DSN 427-8271.

REQUEST FOR LIMITED DOCUMENT

DTIC CONTROL NO.

USE

7248002

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	Forward Header	
Subject:	: Re: Changing classification of report	
Author:	Joe Wander at Armstrong_Lab1	
Date:	9/16/97 10:18 AM	
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Larry		
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joe	e	
	Reply Separator	
_	: Changing classification of report	
Date:	9/16/97 11:06 AM	
Dear Joe	e,	

We have no problems with changing the classification of the report. Please go ahead and do so.

Is there anything that you wish us to do regarding Hill?

Sincerely Yours, Sid Nelson

MEMORANDUM FOR: EQM/Dr. Wander

FROM: AL/EQPP (LARRY TESTERMAN)

SUBJECT: Request for Security and Policy Review

1. The following document has been reviewed for public release in accordance with Air Force Security and Policy review procedures as outlined in AFPD 35-2.

AL/EQ-TR-1996-0024, Characterization of Jet Exhaust Gases at McIellan AFB. SBIR report cleared with written permission of contractor (attached).

- 2. Audience is general public to include foreign nationals. Coordinated with Foreign Disclosure Policy Officer.
- 3. To the best of my knowledge, the release of this document is consistent with current Air Force Policy. I certify that it has been reviewed by competent technical authority, and that it is accurate, unclassified, clear of all proprietary and copyright restrictions, and suitable for public release.
- 4. The document cited above is:

() a. Approved for public release.

(x) b. Approved for public release, subject to the following conditions. SBIR report, cleared with written permission of contractor.

() c. Not approved for release at this level. Please provide six copies for review by SAF/PAS.

() d, Not approved for public release.

LARRY L. TESTERMAN

Scientific and Technical Information Program Manager/ Public Affairs Officer MEMORANDUM FOR: DTIC

FROM: AL/EQPP(STINFO)

SUBJECT: Change of Distribution Statement on AL/EQ-TR-1996-0024

1. Please change the Distribution Statement on Al/EQ-TR-1996-0024 from Distribution B, U.S. Government Agencies Only, to Distribution A, Approved for Public Release.

- 2. Written permission of the contractor, Sorbent Technologies, is in our possession.
- 3. The document has undergone Security and Policy Review by a cognizant Public Affairs Officer. See attached letter.

LARRY L. TESTERMAN

Scientific and Technical

Information Program Manager

APPENDIX I SENDING YOUR TECHNICAL REPORTS TO ML

Management must decide whether or not to send the technical reports through ML for publications processing. If this decision is made, your STINFO focal point will provide you with a copy of thier handbook. At any rate you must still do your own editing and will have to obtain Security and Policy Review from a cognizant PA (theirs.

APPENDIX J STATUS REPORTS FOR DIVISION AND BRANCH CHIEFS

The STINFO focal point will provide you, your branch chief, and the division chief with a list of all technical reports that are more than 6 months old. This status report will be furnished at least once a month. Some examples are attached.

MEMORANDUM FOR: EQA

SUBJECT: Overdue Technical Reports

FROM: EQPP/STINFO

- 1. Here is our latest listing of overdue technical reports for your division. The totals include additions to the list of those over 6 months old.
- 2. We are getting better at publishing our most recent reports. However some of these reports were edited and returned to the project manager as early as 6 years ago. This is especially embarrassing in light of the AFI 61-202 requirement to publish the report not later than 6 months after the technical effort has ended.
- 3. A number of work units are also overdue for closeout. AFI 61-201 will not let us close these until we have received final technical reports
- 4. Repeated not Repeated notifications have not produced camera-ready reports. If we cannot find a publishable technical report, there is a provision for waiving publication. If this is the case, let me know and we will take action to purge the books. If there is any way that I can help your project managers to get these technical reports published or off our records, please let me know.
- 5. As we become part of a new directorate, it seems especially important to demonstrate out professionalism by either publishing our late reports or waiving their publication. In addition, neither Ms Reynolds not I will be here after the end of September; We need to publish as many as possible before we go to another system.
- 6. It would be easier for us to start with an up-to-date record. Still another driver is the fact that work units, technical reports, and case folders make such easy targets for upcoming IG inspections.

LARRY TESTERMAN
Scientific and Technical
Information Program Manager

1 Atch. TR List

cc: EQP EQ

LATE TECHNICAL REPORTS EQA

OVER 6 YEARS OLD

ESL-90-37 DEVELOPMENT OF PROCEDURES TO ADDRESS PERFORMANCE OF EXTERNAL

LEAK DETECTION OCT 90 NIELSEN

OVER 5 YEARS OLD

ESL 91-39 DETERMINING THE MOST COST-EFFICIENT
PUMPING SCHEMES FOR TREATING........ SEP 91 NIELSEN

OVER 3 YEARS OLD

AL/EQ 94-10 ELECTROLUMINESCENT ELECTRODES
FOR REAL-TIME MONITORING OF
POLLUTANTS

FEB 94 NIELSEN

OVER 1 YEAR OLD

95-32 DETECTION OF NON-AQUEOUS-PHASE LIQUIDS BY HIGH-ACCURACY MULTIMODE, MULTIRESOLUTION SYSTEMS
SEP 95 GEER

Final Reviewed by STINFO on 13 Jun. Returned as Unacceptable

96-11 A MICROMODEL STUDY OF RESIDUAL HYDROCARBON MASS TRANSFER RATE IN POROUS MEDIA ROBERTS FEB 96

OVER 6 MONTHS OLD

96-47 BIOASSAY FOR QUANTIFYING INTRINSIC BIOREMEDIATION POTENTIAL OF FUEL HYDROCARBONS BY IRON-REDUCING

BACTERIA

GEER OCT 96

97-05

A LITERATURE SEARCH FOR ATMOSPHERIC SENSOR TECHNOLOGY JUDD

JUDD FEB 97

SUMMARY

Over 6 Years Old Over 5 Years Old Over 3 Years Old Over 1 Year Old

1

1

1

2

Over 6 Months Old

Total Late Reports

2

7